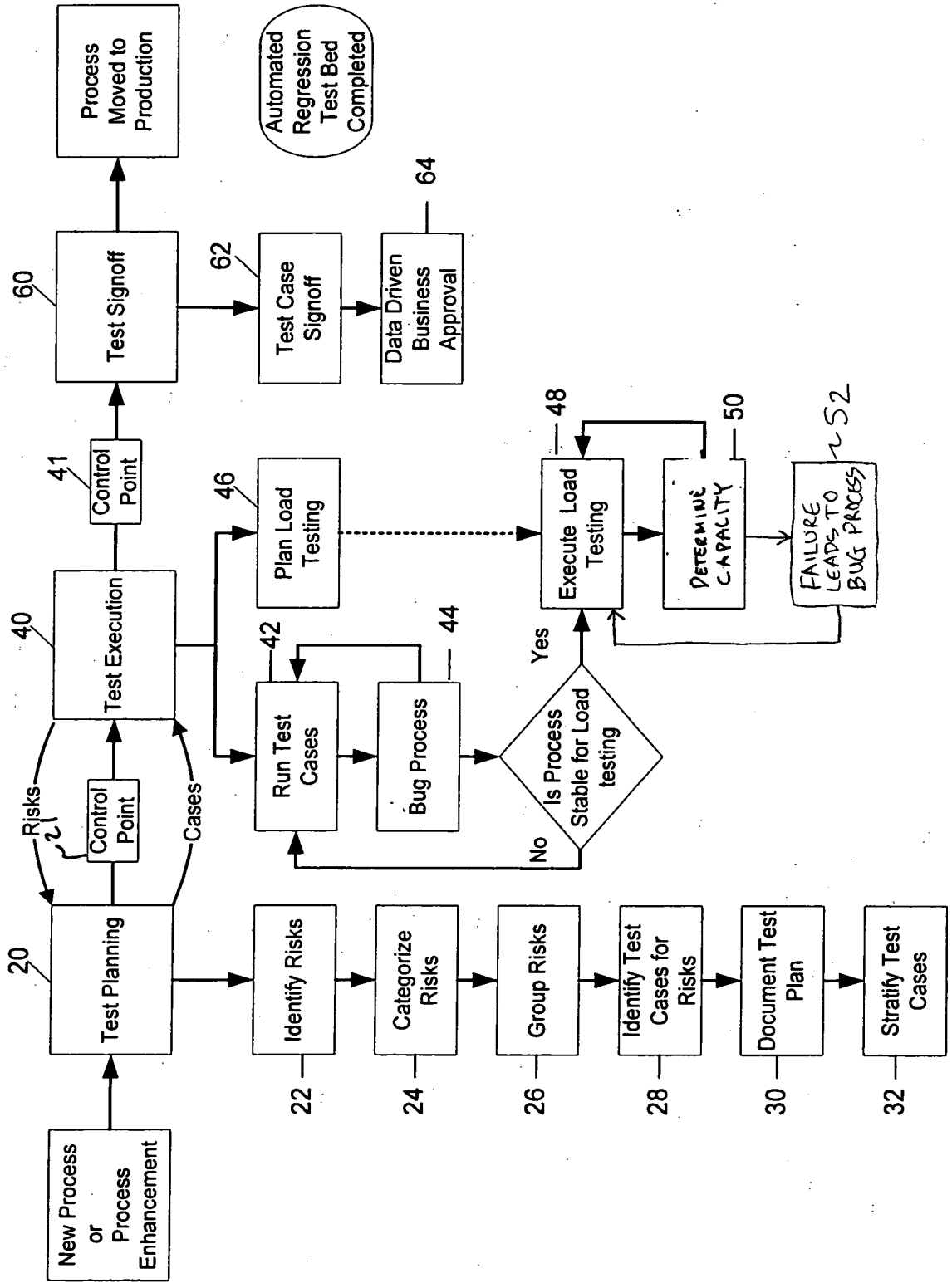
New Process or Process Enhancement
Test Planning
20
Identify Risks
22
Categorize Risks
24
Group Risks
26
Identify Test Cases for Risks
28
Document Test Plan
30
Stratify Test Cases
32
Risks
21
Control Point
Cases
Test Execution
40
Control Point
41
Test Signoff
60
Process Moved to Production
Run Test Cases
42
Bug Process
44
Is Process Stable for Load testing
No
Yes
Plan Load Testing
46
Execute Load Testing
48
Determine Capacity
50
Failure Leads to Bug Process
52
Test Case Signoff
62
Data Driven Business Approval
64
Automated Regression Test Bed Completed

FIGURE 1

Current Situation								
Process Step	Potential Failure Mode	Potential Failure Effects	SEV	Potential Causes	OCC	Current Controls	DET	RPN

FIGURE 2

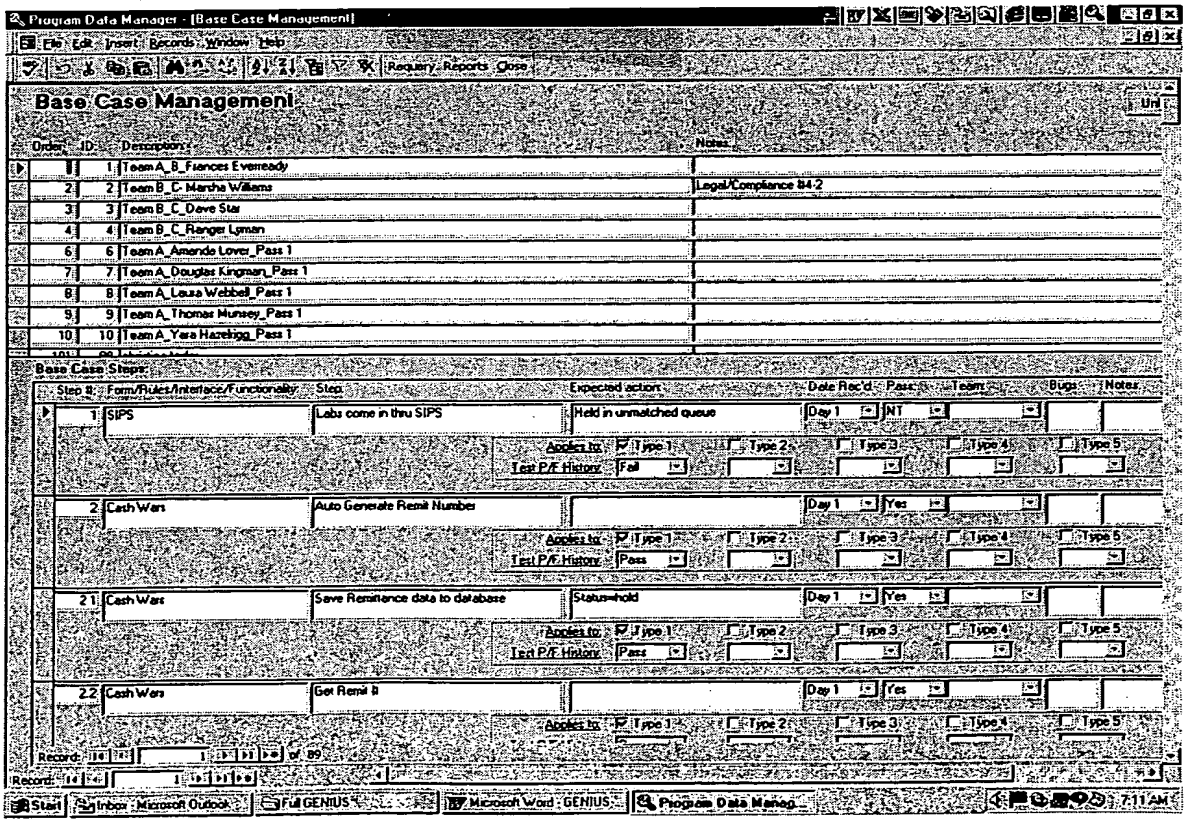

FIGURE 3

Test Case Detail Report

Build Filter = EDE
Test Group Filter = INT

Total # of test cases in this report = 140

Test Group	Case #	Description			Tester		Build	Test Status	Notes		
INT	3	GEFA - 599 /fax copy - GEFA 504/WY/NY/Colony 5			8		EDE	Not			
	Step #	Test Step Action	Input Data	Success Condition	Passed	Related bugs	Tester	Notes (Results)		Rule ID	Req ID
	1	Data entry of forms	Part 1 and Part 2	CLF record is created. No tasks generats; CLF	No						
	2	NB/Verify Champ New App message	Part 1	New App message in Champ	No						
	3	NB/MIB	proper signed authorization	60d5 displays VERDET requirement	No						
	4	NB/Requirements	successful submit	60d5 displays HOS and SMA requirements	No						
	5	CLF 60d1 Display	Payment Method & mode, application date	60d1 shows DIR SEM, application date from	No						
	6	CLF 60d2 Display	Plan, Amount, Riders/Benefits,	60d2 shows Term10C, 2,000,000, Preferred No	No						
	7	CLF 60d3	Agent information	60d3 is blank	No						
	8	CLF 60d7	Owner/Beneficiary/Payor/Proposed Insured	60d7 displays proposed insured, owner,	No						
	9	CLF 60d8	Owner/Insured/Payor address	60d8 displays proposed insured, owner, payor	No						
	10	CLF 60US	Premium Pay Stats, Channel, Site, BGA #,	60US correct based on application	No						
	11	CLF 60xx	Bill Code, AppSL	60xx correct based on application	No						
	12	AKUP	Replacement Code, change DOB 11/11/1938	Alpha record should update to reflect new	No						
	13	ACDL	Delete Current Alpha - verify correct seq id	Alpha record is deleted	No						
	14	AKLM	From pending display screen create new Alpha	Alpha record built and seq id matches the 6091	No						
	15	60d5 - MIB	Response received from MIB	60D5 screen displays receipted VERDET	No						
	16	20NA	add Payor - Susan R Grabherr, 123 any	6089, 60d7 should display Payor name	No						
	17	40kw	add first modal premium	60CW and 60D1 display money applied	No						
	18	Champ - final disposition	Decline medically		No						

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FIGURE 4

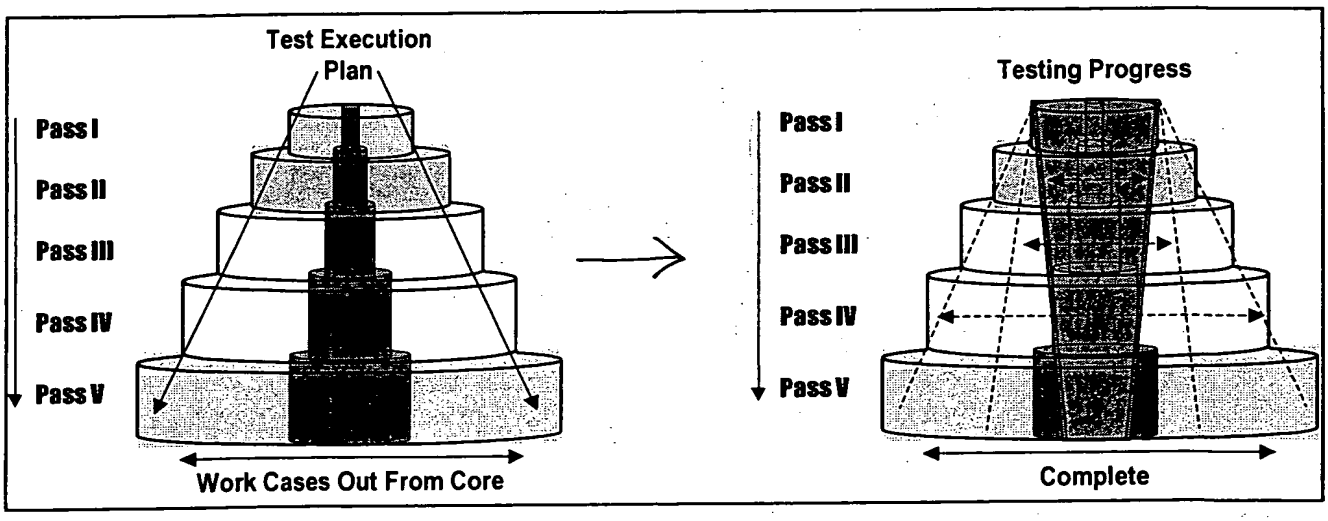

FIGURE 5

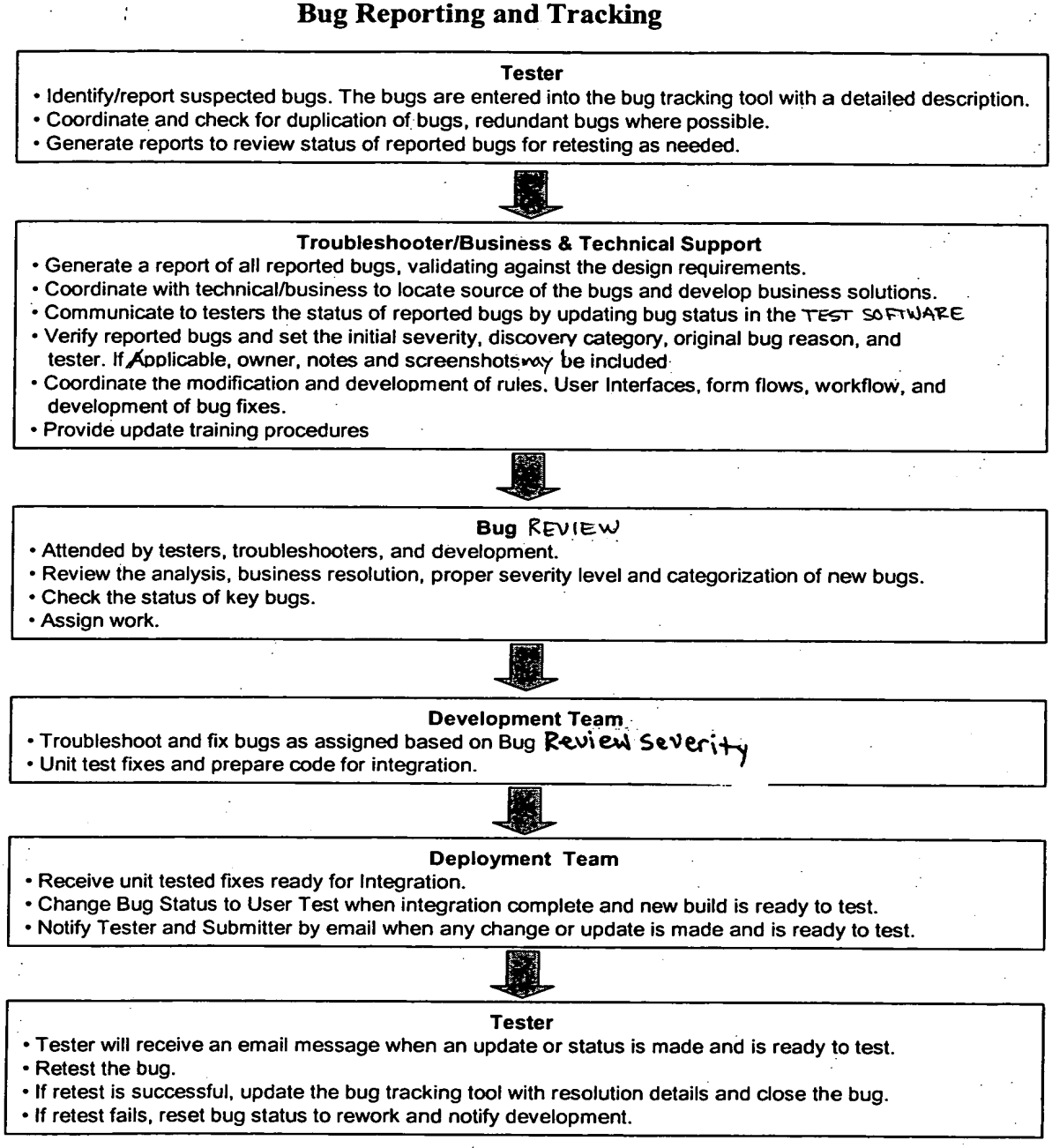
Bug Reporting and Tracking
Tester
• Identify/report suspected bugs. The bugs are entered into the bug tracking tool with a detailed description.
• Coordinate and check for duplication of bugs, redundant bugs where possible.
• Generate reports to review status of reported bugs for retesting as needed.
Troubleshooter/Business & Technical Support
• Generate a report of all reported bugs, validating against the design requirements.
• Coordinate with technical/business to locate source of the bugs and develop business solutions.
• Communicate to testers the status of reported bugs by updating bug status in the TEST SOFTWARE
• Verify reported bugs and set the initial severity, discovery category, original bug reason, and tester. If Applicable, owner, notes and screenshots may be included
• Coordinate the modification and development of rules. User Interfaces, form flows, workflow, and development of bug fixes.
• Provide update training procedures
Bug REVIEW
• Attended by testers, troubleshooters, and development.
• Review the analysis, business resolution, proper severity level and categorization of new bugs.
• Check the status of key bugs.
• Assign work.
Development Team
• Troubleshoot and fix bugs as assigned based on Bug Review Severity
• Unit test fixes and prepare code for integration.
Deployment Team
• Receive unit tested fixes ready for Integration.
• Change Bug Status to User Test when integration complete and new build is ready to test.
• Notify Tester and Submitter by email when any change or update is made and is ready to test.
Tester
• Tester will receive an email message when an update or status is made and is ready to test.
• Retest the bug.
• If retest is successful, update the bug tracking tool with resolution details and close the bug.
• If retest fails, reset bug status to rework and notify development.

FIGURE 6

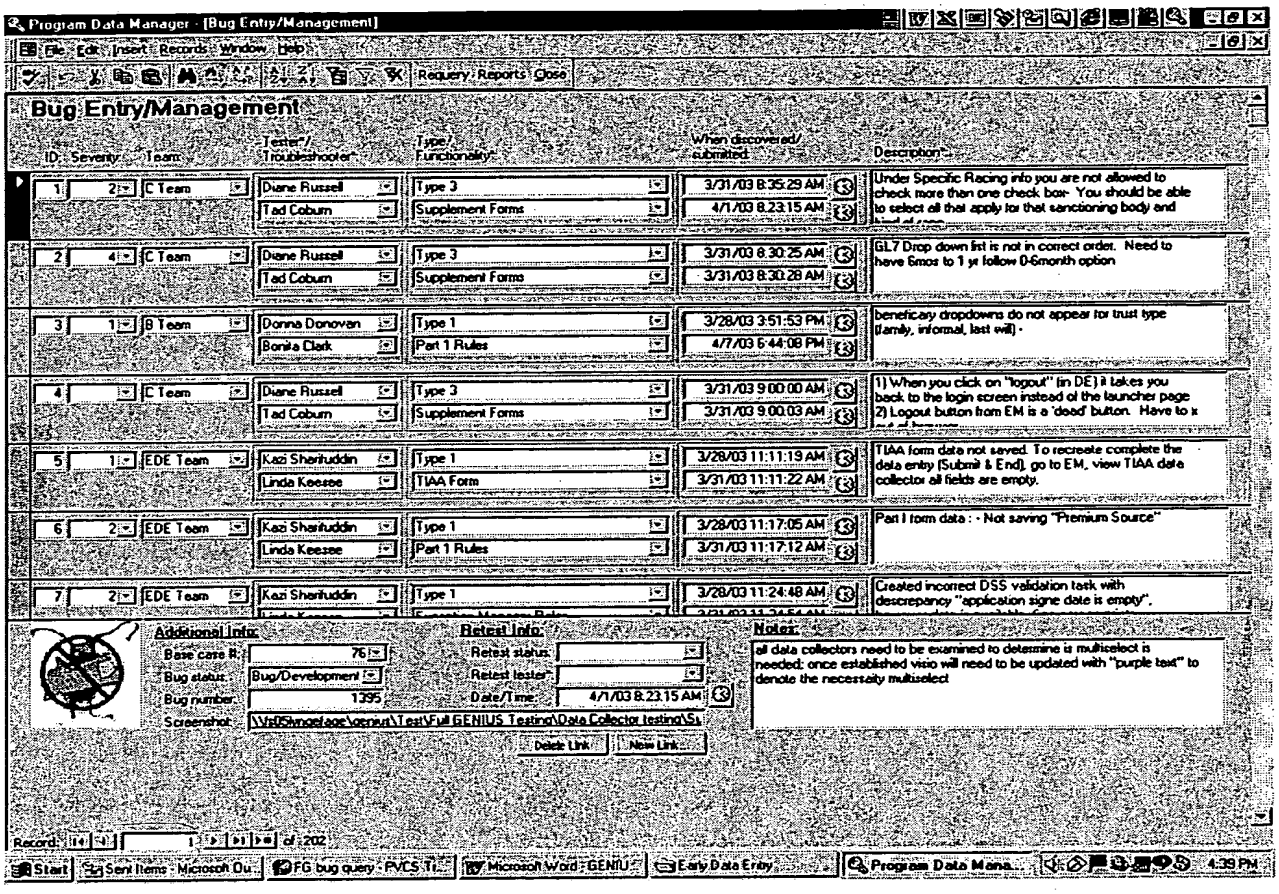

FIGURE 7

Production vs. Model Office Comparison									
	Server	Region	Applications	Server Type	CPU	Int	FP	Memory	Disks
Server Role 1	nm01	Production	App 1	Server Type 1	8 * 900 MHz	3680	5040	16 GB	6 * 72 GB
	nm02	Production	App 2	Server Type 1	8 * 900 MHz	3680	5040	16 GB	6 * 72 GB
					Total	7360	10080		
	nm09	Model	App 1 & 2	Servet Type 3	2 * 750 MHz	740	640	4 GB	2 * 36 GB
					Total	740	640		
					Difference	9.95	15.75	# of X larger	
Server Role 2	nm03	Production	App 3	Server Type 3	2 * 750 MHz	740	640	4 GB	2 * 36 GB
	nm04	Production	App 3	Server Type 3	2 * 750 MHz	740	640	2 GB	2 * 36 GB
	nm05	Production	App 3	Server Type 3	2 * 750 MHz	740	640	4 GB	2 * 36 GB
	nm06	Production	App 3	Server Type 3	2 * 750 MHz	740	640	4 GB	2 * 36 GB
					Total	2960	2560		
	nm10	Model	App 3	Server Type 3	2 * 750 MHz	740	640	4 GB	2 * 36 GB
					Total	740	640		
					Difference	4	4	# of X larger	
Server Role 3	nm07	Production	App 4	Server Type 2	2 * 900 MHz	920	1260	4 GB	6 * 72 GB
	nm08	Production	App 4	Server Type 2	2 * 900 MHz	920	1260	4 GB	6 * 72 GB
					Total	1840	2520		
	nm11	Model	App 4	Server Type 2	2 * 900 MHz	920	1260	4 GB	6 * 72 GB
					Total	920	1260		
					Difference	2	2	# of X larger	

FIGURE 8

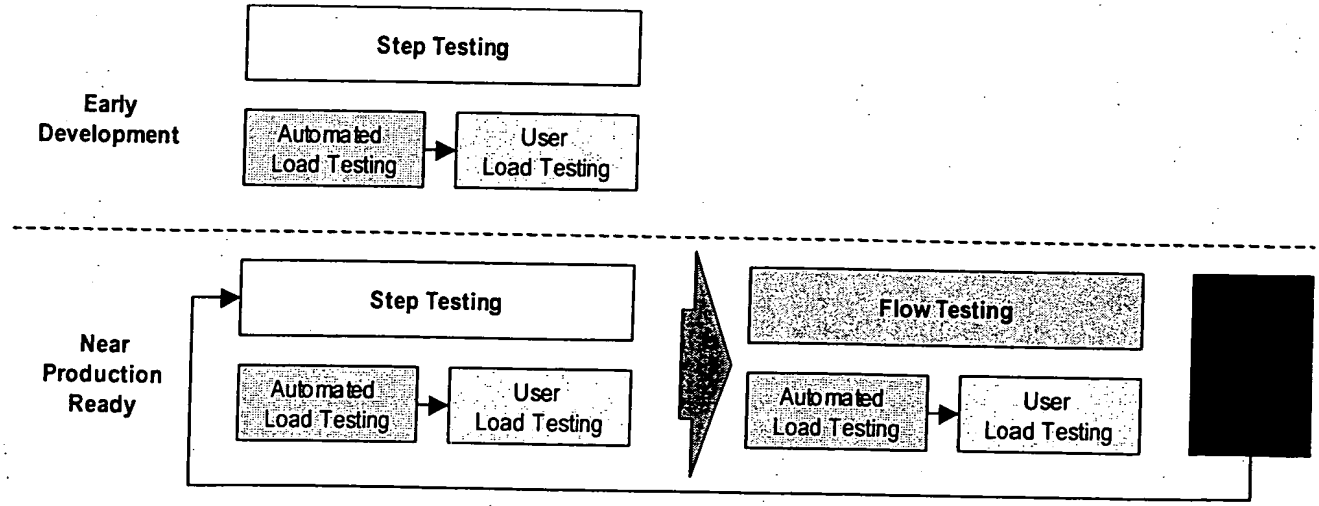

FIGURE 9

Validation Testing					
Forms Submitted: 2016					
Source	**Start**	**End**	**Elapsed**	**Forms**	**Per minute**
log.3	12:07:20	12:56:34	49	146	2.98
log.2	12:56:41	15:32:49	154	502	3.26
log.1	15:33:06	18:12:38	159	477	3.00
log	18:12:46	19:06:07	54	147	2.72
Total Successful			416	1272	3.06
Error queue				220	
Retry queue				524	
Forms Processed				2016	
System	**Model**	**CPUs**	**Integer**	**Floating Point**	
nm01	Server Type 1	8 * 900 MHz	3680	5040	
nm02	Server Type 1	8 * 900 MHz	3680	5040	
			7360	10080	Total
nm03	Server Type 2	4 * 900 MHz	1840	2520	
			4	4	Comparison (# of times faster Production should be)
				12.2	Production estimate per minute (Comparison * per minute)
				10000	Validations per day
				817.61	Minutes to process
				13.63	Hours to process

FIGURE 10

1	2	3	4	5	6	7	8	9
Type	# Per Day	Actual Model Performance		Mod/Prod Capacity Difference*	Overhead**	Expected Production Performance	Actual Production Performance***	
Transaction 1	240	35.15	8436.21	9.95	20%	1059.83	12.98	3115.80
Transaction 2	720	27.05	19479.17	9.95	20%	2447.13	4.92	3541.67
Transaction 3	400	20.56	8222.22	9.95	20%	1032.94	2.25	898.69
Transaction 4	800	93.05	74438.30	9.95	20%	9351.55	9.97	7975.96
Transaction 5	800	6.99	5595.82	9.95	20%	702.99	2.68	2144.02
Transaction 6	200	10.09	2017.20	9.95	20%	253.42	6.44	1287.62
Transaction 7	4000	118.61	474428.20	9.95	20%	59601.53	21.61	86453.84
Transaction 8	4000	157.55	630203.04	9.95	20%	79171.24	10.42	41666.68
Transaction 9	100	27.01	2700.62	9.95	20%	339.27	1.91	191.06
Transaction 10	200	23.32	4663.50	9.95	20%	585.87	4.63	925.93
		Total Seconds	1230184.28			154545.76		148201.26
		Total Hours	341.72			42.93		41.17

* Calculated from SpecINT ratings

** Estimated additional overhead

*** Improvements resulting from load testing improved the actual system performance on certain transactions

FIGURE 11

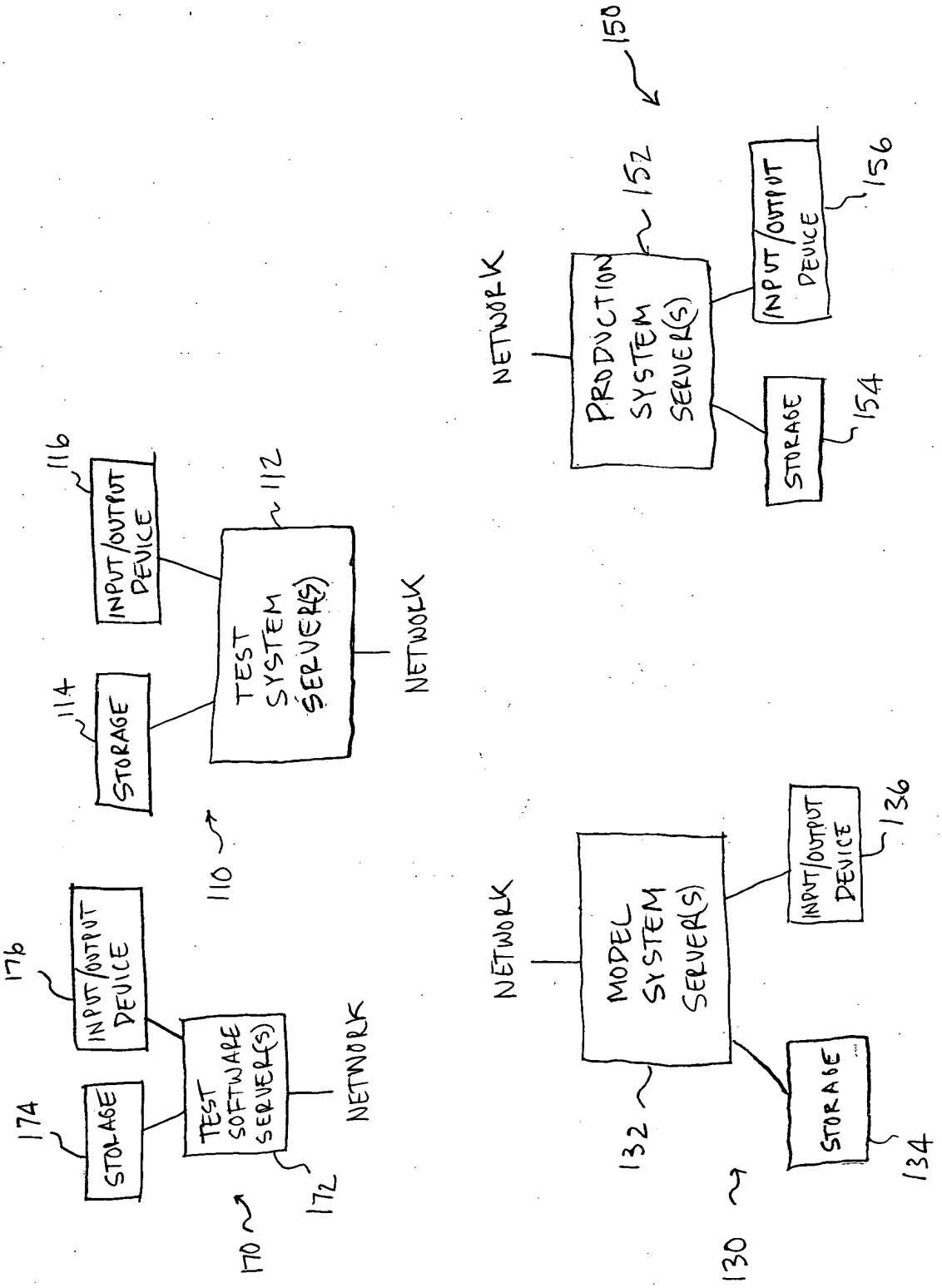
150
NETWORK
PRODUCTION SYSTEM SERVER(S)
152
INPUT/OUTPUT DEVICE
156
STORAGE
154
NETWORK
MODEL SYSTEM SERVER(S)
132
INPUT/OUTPUT DEVICE
136
STORAGE
134
130
NETWORK
TEST SOFTWARE SERVER(S)
172
INPUT/OUTPUT DEVICE
176
STORAGE
174
170
110
TEST SYSTEM SERVER(S)
112
INPUT/OUTPUT DEVICE
116
STORAGE
114
NETWORK

FIGURE 12